

## **REMARKS**

### **I. CONTINUED SPECIAL STATUS**

Applicant respectfully reminds the Examiner that this application continues to have special status. Accordingly, its examination has priority over examination of other, non-special applications, and the guideline of responding to an applicant's communication within 30 days of its forwarding to the examiner should be observed, instead of the normal 60 days.

### **II. CLAIMS 52, 62, 105, 115, 148, AND 158 – 112 REJECTION**

The Office Action states (see page 2) that the limitation “preventing knowledge” is not supported in the specification. This is incorrect. There are many places in the specification that describe preventing knowledge of prospective transaction entries. Examples follow, with the particularly relevant language underlined. Please note when reading the examples that a match is also referred to as a synapse in the specification – see paragraph 0179 of the USPTO-published application, which states “a match (also known as a ‘synapse’)”.

“Unlike current transaction interest location systems, this system divulges neither principal identities nor their proprietary transaction interest information as a prerequisite to potentially finding a qualified natural party with concurrent counter-side interests in transacting a specific item.” See paragraph 0046 of the USPTO-published application.

“Communications applications 86, 88 and 90 allow encrypted data transfer with various remote user nodes/terminals, such as those referred to above. The communications applications allow prospective buyers and sellers at the remote nodes/terminals to log onto the host system. These applications provide either a direct connection or a user specific web page wherein users can enter, modify, monitor and delete indications of transactional interest without disclosing information about these interests, or about themselves, to any other user or entity.” See paragraph 0091 of the USPTO-published application.

“As seen in FIG. 7B, a message indicating the synapse is sent from the database server to the communications server, and then simultaneously transmitted (as at 2, or 2A plus 2B) to the transacting parties. The parties, simultaneously made aware of the match and of each other, are free to contact one another to complete the transaction, as indicated at 3. Even at this stage, no one except the transacting

parties is aware of the respective offers to buy/sell item 'X'." See paragraph 0158 of the USPTO-published application.

"With reference to FIG. 7C, if the transacting parties have designated respective agents, the synapse triggers the same message from the database server to the communications server. The communications server simultaneously transmits alerts to the buyer's agent and seller's agents, represented as step b in the figure. Each agent notifies its principal (step c), and receives instructions from its principal regarding the transaction. Finally, the agents contact one another (e, f) to complete the transaction. Again, at this stage, the nature of the transaction is known only to the transacting parties and their agents." See paragraph 0159 of the USPTO-published application.

"At step A, a trader at account 1 enters a "buy" indication into the system. The indication consists of side & security. Traders enter indications from their terminals. The communication link can be of any variety\*\*. The central station is a secured facility protected by firewalls, secure socket layers and high grade encryption. Nothing takes place unless, at step B, a trader at account 2 enters a "sell" indication into the system. At this point, at step C, the "sell" indication of the trader at account 2 is paired off with the "buy" indication from the trader at account 1. This pairing indicates that a synapse has occurred. Synapses are made and known only by the computer. Then, and only then, are the transaction interests of both parties disclosed and then only to the parties. Alerts (with contact information) are simultaneously sent only to the parties involved and to their agents, if agents have been retained by either of the parties. Each party now knows that it has a confidential natural contra-side to its trading interest. Henceforth, at step E, the natural contra-sides contact one another to begin negotiations which leads to a completely confidential negotiated transaction between only the qualified parties." See paragraph 0169 of the USPTO-published application.

"No information concerning either party's indication is revealed until there is a synapse between qualified contra-parties. Then, the only entities who are alerted are the matched accounts and/or their designated agents. A minimum commitment or a good faith deposit may be required to enter the system. This is meant to keep information seekers out, to ascertain that the other side is real and to make sure that a real negotiation takes place following a synapse." See paragraph 0170 of the USPTO-published application.

“When a synapse occurs, all matched buyers and sellers (or their appointed agents) are informed simultaneously that a synapse has occurred. Up to this point, none of the parties knows the identity of the other party (or parties) involved. When a synapse occurs, the contra-parties (or their agents) are put in communication with one another. The transaction is then negotiated between the matched parties or their agents.” See paragraph 0173 of the USPTO-published application.

“When a synapse occurs, all matched buyers and sellers (or their appointed agents) are informed simultaneously that a synapse has occurred. Up to this point, none of the parties knows the identity of the other party (or parties) involved. When a synapse occurs, the contra-parties (or their agents) are put in communication with one another. The transaction is then negotiated between the matched parties or their agents.” See paragraph 0044 of the USPTO-published application.

“The above-described exemplary embodiment of the present invention has the following features and advantages. It enables principals to anonymously enter their transactional interest in buying or selling any item into a secure centralized computer networked facility. This protects the transaction interests of any potential contra-sides to a mutually desired transaction before these interests are disclosed to either side and more importantly, without disclosing this information to anyone. The system protects the transactional interests of interested contra-parties to a potential transaction prior to any disclosure of that interest. Once entered, these transactional interests have the potential of being matched with natural contra-parties to their interests--without any disclosure of these proprietary transactional interests to any other party. The contra-party transactional interests are matched in secrecy. The system alerts qualified parties (or their designated agents) ONLY when each has a qualified party matched on the contra-side to their transactional interest. Only matched parties of a mutually desired transaction (or their agents) are alerted in confidence. Qualified parties (or their designated agents) are alerted ONLY when each has a qualified party matched on the contra-side to their transactional interest. When a match occurs, the matched parties with contra-side transactional interests will be confidentially alerted and given each other's contact information according to a prior agreed upon protocol. Negotiations will then ensue directly with one another (or via agent(s)) in a traditional manner. All potential participants are pre-qualified by requiring each to make a minimum firm commitment prior to being allowed to enter a transactional interest into the system. This may entail posting a non-performance penalty bond or earnest money deposit which shall go to the contra-party to a synapse if the other party fails to perform (enter into negotiations) after a synapse.” See paragraph 0176 of the USPTO-published application.

Indeed, this data security aspect is a fundamental principle of the invention and a key part of its reason for being, as further discussed in the specification:

“Previous systems require one or both parties to unilaterally display, divulge and/or broadcast their proprietary transactional interests in the hopes of eliciting a response from natural counter-parties. A principal's interests can be, and often are, jeopardized when the transactional interest information representing its desire to put a proprietary investment decision into action is divulged ahead of locating and contacting a qualified counter-party.” See paragraph 0007 of the USPTO-published application.

“Unfulfilled transaction interest information has value for a number of reasons: First, unfulfilled transactional interest information typically represents a proprietary investment idea generated through work and analysis of the principal. Second, this interest, if divulged ahead of fulfillment, can often adversely affect the liquidity (availability and price) of the item. Generally, the larger the transactional interest and/or the less liquid of an item, the greater the probability that the unilateral exposure of transactional interest will affect its price adversely. Third, pre-fulfillment disclosure of the identity of the principal often has an adverse impact if, for example, the principal is known to be an intelligent, large and/or aggressive investor.” See paragraphs 0009-0011 of the USPTO-published application.

“Investors need a system that affords an opportunity to anonymously and confidentially locate a natural counter-party interested in transacting the same specific investment item without either side having to disclose its proprietary transactional interest information beforehand in order to obtain such an opportunity.” See paragraph 0015 of the USPTO-published application.

“A further object of the present invention to provide a secure information management system wherein transactional interest indications entered by users are held in a database residing on a secure server such that they remain protected and undisclosed.” See paragraph 0020 of the USPTO-published application.

“It is a further object of the present invention to preserve the confidentiality of the indications of interest entered by the parties until after a match has occurred.” See paragraph 0026 of the USPTO-published application.

In addition, it must be noted that it is not necessary for the specification to contain the exact term “preventing knowledge”. Instead, what’s necessary is that the specification describes the concept or principle of preventing knowledge of prospective transaction entries – and the specification certainly does that, clearly and unambiguously.

In sum, preventing knowledge of prospective transaction entries is well-supported in the specification. The phrases “this system divulges neither principal identities nor their proprietary transaction interest information”; “users can enter, modify, monitor and delete indications of transactional interest without disclosing information about these interests, or about themselves, to any other user or entity”; “no one except the transacting parties is aware of the respective offers”; “the nature of the transaction is known only to the transacting parties”; “synapses are made and known only by the computer”; “then, and only then, are the transaction interests of both parties disclosed and then only to the parties”; “no information concerning either party’s indication is revealed until there is a synapse between qualified contra-parties”; and “this protects the transaction interests of any potential contra-sides to a mutually desired transaction before these interests are disclosed to either side and more importantly, without disclosing this information to anyone”, all support the preventing knowledge claim limitation.

### **III. CLAIMS 1, 18, 35, 51, 52, 62, 78, 94, 105, 115, 121, 137, 148, AND 158 – 103 REJECTION – SEC REFERENCE IN VIEW OF GUTTERMAN ‘031**

#### **A. Non-Obviousness of Modifying LimiTrader’s Order Entry System From a Simple Dial-Up System to an Integrated Order Management System (OMS)**

The arguments and expert declarations against obviousness contained in Amendment K, Applicant’s June 30, 2010 response to the previous Office Action, are incorporated herein by reference.

#### **1. Additional Sworn Declarations**

Additional sworn declarations from John Doulamis and Ricardo Gonzalez, two other experts in the OMS field, are attached hereto. In the declarations, Mr. Doulamis and Mr. Gonzalez state how their extensive educational background and professional experience gives them the understanding and expertise needed to make the correct judgment regarding non-obviousness.

Mr. Doulamis and Mr. Gonzalez do not make mere conclusory statements that the proposed modification would not be obvious. Instead, they show why the proposed modification would not be obvious, fully supporting their conclusions with detailed explanations.

Mr. Doulamis corroborates Steve Levy's earlier declaration that the configuration which the Office has suggested would "get around" the problem caused by an integrated OMS cutting off LimiTrader's important individualized interaction features – i.e., a two interface system wherein individuals would input orders into the central system via an OMS, with a dial-up system "on the side" which would involve the individuals placing orders via the OMS dialing into the central system to receive non-automated assistance on those orders – would not be workable or economically viable. As the declaration states, a configuration like that would entail unnecessary duplication of the contact interface between order placers and the central system (i.e., place orders using one interface, but do everything else using another, completely separate interface). Such duplicate interfaces would require constant communication and reconciliation to ensure that information received from, and provided to, an order-placer via one contact interface matched the information received from, and provided to, an order-placer via the other contact interface. Multiple interfaces are more expensive to operate and carry the risk of mismatched, inconsistent data. (See Doulamis declaration, paragraph 18.)

Further, both Mr. Doulamis and Mr. Gonzalez identify additional reasons why modifying LimiTrader to input orders via an integrated OMS would not have been obvious as of May 1999.

Both Mr. Doulamis and Mr. Gonzalez corroborate Mr. Levy's earlier declaration that important, advantageous features of the LimiTrader system would be disabled if it were integrated with an OMS that was in existence as of May 1999. (See Doulamis declaration, paragraphs 15-16; and Gonzalez declaration, paragraphs 19-21.) This alone makes the proposed modification non-obvious, as stated in MPEP 2143.01:

"If [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)".

Mr. Gonzalez also corroborates Steve Levy's earlier declaration that the lack of data security in the LimiTrader system (existing-order parties receive notice of a match before an incoming-order party, and can benefit from that information by simply choosing not to contact the incoming-order party) means that OMS users would severely limit what information is sent through the OMS to the central matching system. Mr. Gonzalez agrees with Mr. Levy that it would not be uncommon for traders to insist that the systems not be integrated in cases like this. (See Gonzalez declaration, paragraphs 15-18.)

Both Mr. Doulamis and Mr. Gonzalez corroborate Rolando Rabines' earlier declaration that LimiTrader has a closed system design and architecture, and was not designed to be integrated with other systems. Switching LimiTrader from a dial-up order input system to an integrated OMS would not have been possible without a substantial redesign and rewrite of the LimiTrader system – making integration with an OMS not only impractical, but unthinkable. (See Doulamis declaration, paragraphs 7-14; and Gonzalez declaration, paragraphs 6-14.)

Mr. Doulamis and Mr. Gonzalez also corroborate Mr. Rabines's earlier declaration that the dial-up system used by LimiTrader to communicate with parties would be inadequate to support the equity trading decisions and workflows from the OMS, and that LimiTrader's 30-minute backup recovery capability would be unacceptable to the OMS market. (See Doulamis declaration, paragraphs 12 & 14; and Gonzalez declaration, paragraphs 12 & 14.)

Mr. Doulamis and Mr. Gonzalez agree with Mr. Rabines that LimiTrader's non-secure matching approach is not suited for the OMS market. They also agree with Mr. Rabines that it is unthinkable that OMS traders would direct any order flow into a matching system such as LimiTrader which notifies multiple parties of possible matches. OMS traders would require that they be immediately and simultaneously notified of any match, and that only one match be proposed at a time. LimiTrader was not designed to support this requirement. (See Doulamis declaration, paragraph 13; and Gonzalez declaration, paragraph 13.)

In sum, Applicant has now submitted sworn declarations from four different experts in the OMS field, who together have almost 70 years experience in the financial securities business specifically focused on OMS development, implementation, and integration. These experts have provided multiple reasons why the proposed modification would not have been obvious in May 1999. The September 22, 2010 Office Action did not address or discuss all this expert testimony in any way. If a further Office Action issues after this response, Applicant requests that the Office Action do so.

**B. Non-Obviousness of Switching LimiTrader's Match Notification Method to the Invention's Very Different Match Notification Method**

The arguments and expert declarations against obviousness contained in Amendment K, Applicant's June 30, 2010 response to the previous Office Action, are incorporated herein by

reference.

## 1. Additional Sworn Declaration

An additional sworn declaration from Jack Vensel, another expert in the field of crossing/matching systems for trading financial securities, is attached hereto. In his declaration, Mr. Vensel states how his extensive educational background and professional experience gives him the understanding and expertise needed to make the correct judgment regarding non-obviousness. Mr. Vensel does not make mere conclusory statements that the proposed modification would not be obvious. Instead, he shows why the proposed modification would not be obvious, fully supporting his conclusions with detailed explanations.

Mr. Vensel's declaration corroborates the earlier declarations from Chris Hynes; Stephen Bookbinder; Davis Gaynes; Richard Holway; and Gregory McFarland that modifying the LimiTrader system to switch from notifying existing-order parties only to notifying both contraparties simultaneously would not have been obvious as of Shaw's May 1999 priority date, because it would entail significantly changing the stated purpose and very core of the LimiTrader system. Mr. Vensel agrees with the other experts that the way users are informed of a potential match, as well as the way users interact with the system and with each other, are fundamental operating principles of any matching system. He also agrees that changing these aspects would alter LimiTrader's central purpose and basic operating principles, which alone makes the proposed modification non-obvious, as stated in MPEP 2143.01:

“If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F. 2d 810, 123 USPQ 349 (CCPA 1959)”.

Mr. Vensel further agrees with the other experts that such a modification would have been expensive, technically complex, and logistically difficult. He agrees that this would have required assembling a team of highly specialized technology and trading experts to build the functionality necessary for such a modification.



In addition, Mr. Vensel agrees with the other experts that such a change would not have been obvious because certain advantages of LimiTrader's method and protocol for match notification would be lost. Mr. Vensel points out that contacting only multiple existing-order parties, as LimiTrader does, has a success probability, efficiency and speed advantage versus contacting the matching counterparties simultaneously, as Applicant does. And he clearly explains the source of this advantage which would be lost.

Mr. Vensel further agrees with the other experts that success probability, efficiency and speed are very important in trading system operations, and that it is clearly important to LimiTrader. He also agrees that the combined advantages of success probability, efficiency and speed are a key reason that LimiTrader calls two existing-order parties at a time – to speed up the trading process and increase the odds that at least one of the existing-order parties will be interested. It simply would not be obvious to give up such important advantages.

In sum, Applicant has now submitted sworn declarations from six different experts in the field of crossing/matching systems for trading financial securities, who have over 140 years combined experience in the financial securities business including explicit familiarity with the various innovations in crossing and matching trading systems. These experts have provided multiple reasons why the proposed modification would not have been obvious in May 1999. The September 22, 2010 Office Action did not address or discuss all this expert testimony in any way. If a further Office Action issues after this response, Applicant requests that the Office Action do so.

**C. Neither the SEC Reference Nor Gutterman '031 Discloses the Use of Authorized Representatives**

**Regarding Claim 1:** the Office Action states (pages 3-4) that the SEC reference discloses notifying the authorized representative of the counterparties that a match has occurred between the counterparties. This is incorrect. The SEC reference does not mention authorized representatives of counterparties at all – instead, the LimiTrader system notifies the existing-order contraparty, and only the existing-order contraparty.

The Office Action also states (page 4) that the SEC reference discloses providing contacting means to the authorized representative to allow the authorized representative to contact the counterparties so that a transaction can be consummated between the counterparties; and consummating the transaction between the counterparties through direct consummation by the authorized representative and the counterparties. This is incorrect. Again, the SEC reference does

not mention authorized representatives of counterparties at all. Instead, the LimiTrader system notifies the existing-order counterparty, and only the existing-order counterparty.

**Regarding Claim 18:** the Office Action states (pages 7-8) that the SEC reference discloses notifying the counterparties and their respective authorized representatives that a match has occurred between the counterparties. This is incorrect. The SEC reference does not mention authorized representatives of counterparties at all – instead, the LimiTrader system notifies the existing-order counterparty, and only the existing-order counterparty.

The Office Action also states (page 8) that the SEC reference discloses providing contacting means to each of the authorized representatives to allow the authorized representatives of the counterparties to contact each other so that a transaction can be consummated between the counterparties. This is incorrect. Again, the SEC reference does not mention authorized representatives of counterparties at all. Instead, the LimiTrader system notifies the existing-order counterparty, and only the existing-order counterparty.

In sum, since neither the SEC reference nor Gutterman '031 discloses the use of authorized representatives, the proposed combination of these two references does not meet the limitations of Claims 1 and 18.

**D. The SEC Reference Does Not Disclose The *User Page Data Security Component* Defined In Dependent Claims 56, 109, and 152.**

The Office Action states (page 19) that the 5th paragraph on page 9 of the SEC reference discloses the further data security component detail defined in these claims – that is, the *user pages*. This is incorrect.

The relied-on lines of the SEC reference read:

“LIMITrader is a dial-up system. At any time, twenty-four hours a day, n2 a participant may call up LIMITrader on his existing personal computer using an error checking modem and standard telephone circuits. LIMITrader's host computer will be located in Massachusetts n3 and provided and serviced by Ziff-Davis TICO, a so-called service bureau, with a contract to shift operations to a [\*27] back-up computer within 30 minutes of any failure. The host computer has the capacity to handle 50 simultaneous users and a much larger number (hundreds) of on-line users. If volume of users on LIMITrader becomes such that response time of the host computer is below acceptable response times, the system will be migrated to a computer with greater capacity. Based on such capacity and migration capability, the Company believes the system will provide sufficient capacity to handle the volume of data reasonably anticipated to be entered into the system. The Company intends to periodically review and test its system to ensure sufficient capacity, identify potential weak points, and reduce the risk of serious system failures and threats to

system integrity. Since LIMITrader functions through the existing public switched-telecommunications network, the capacity and accessibility of LiMITrader will be limited by the sufficiency of such existing networks in any particular area (although in practical terms, such capacity would be unlimited). The Company has in place security procedures reasonably designed to (i) prevent unauthorized access to LIMITrader, both by employees of the Company or [\*28] the clearing broker, by participants in the system and by persons who are not affiliated with the Company, the clearing broker or the system, and (ii) to safeguard the system and to protect against threats to the proper functioning of the system.”

The above passage does not describe the specific *user page* structure defined in these claims. Instead, the passage merely discusses broad, general security objectives.

**E. The SEC Reference Does Not Disclose The Language Defined In Dependent Claims 13-17; 30-34; 46-50; 76-77; 89-93; 103-104; 132-136; and 146-147.**

The Office Action (page 6) discusses Claims 5-7, 9-11, and 13-17 together, and states that the SEC reference discloses the use of limit orders and direct matches. The Office Action cites Page 2, Part B of the SEC reference for support: “A participant wishing to trade on the System may enter a limit order, which may be either a firm position or an ‘indication’.”

However, Claims 13-17 do not have anything to do with limit orders. Claim 13 concerns not making a match unless the input fields in the transferee’s and transferor’s respective indications of interest all match. Claim 14 concerns making a match even if the input fields in the transferee’s and transferor’s respective indications of interest don’t all match. Claim 15 concerns the transferee making a good faith deposit. Claim 16 concerns the potential transferor making a minimum firm commitment. Claim 17 concerns the further step of reporting the consummation and terms of the transaction back to the central processing system. The language of these claims is certainly not met by the cited passage, and indeed is not met by the SEC reference at all.

Claims 30-34; 46-50; 89-93; and 132-136 contain the same language as Claims 13-17, and are not met by the SEC reference for the same reasons discussed above. Claims 76-77; 103-104; and 146-147 contain the same language as Claims 13-14, and are not met by the SEC reference for the same reasons discussed above.

**IV. DEPENDENT CLAIMS**

Finally, because independent claims 1, 18, 35, 51, 52, 62, 78, 94, 105, 115, 121, 137, 148, and 158 define patentably over the prior art as discussed above and in Amendment K, their respective dependent claims 2-17, 19-34, 36-50, 68-77, 53-61, 63-67, 79-93, 95-104, 106-114, 116-120, 122-136, 138-147, 149-157, and 159-163 also define patentably for the same reasons.

**CONCLUSION**

For all of the above reasons, Applicant requests reconsideration of the rejections contained in the Office Action. Applicant submits that the claims all define patentably over the prior art, and that this application is now in condition for allowance.

Respectfully,

/John A. Galbreath/

John A. Galbreath, Reg. #46,718

Galbreath Law Offices, P.C.  
2516 Chestnut Woods Ct.  
Reisterstown, MD 21136-5523  
Tel. (410) 628-7770